

Together with the current-measurements four series of water-samples and temperatures were taken; the results are given in the following table:—

Temperatures and salinities in the Straits of Gibraltar.

Depth. Metres.	Station 18 A. 29 IV. 11½ A.M.- 12½ P.M.		Station 18 B. 29 IV. 2-2½ P.M.		Station 18 C. 29 IV. 11-12 P.M.		Station 18 D. 30 IV. 9½-10½ A.M.	
	Temp.	Salinity.	Temp.	Salinity.	Temp.	Salinity.	Temp.	Salinity.
0	17.0	36.12	16.6	36.14	16.6	36.02	17.4	36.17
25	15.16	36.19	14.89	...	15.6	...	16.18	...
50	13.29	37.80	13.35	...	15.09	36.20	15.39	...
100	12.92	38.30	12.92	38.33	14.38	36.28	14.09	...
200	12.91	38.39	...	...	13.11	37.97	12.94	38.36
300	12.87	38.39	...	...	12.89	38.39	...	...

Here also we see considerable variations from time to time at the different depths, variations corresponding to a difference

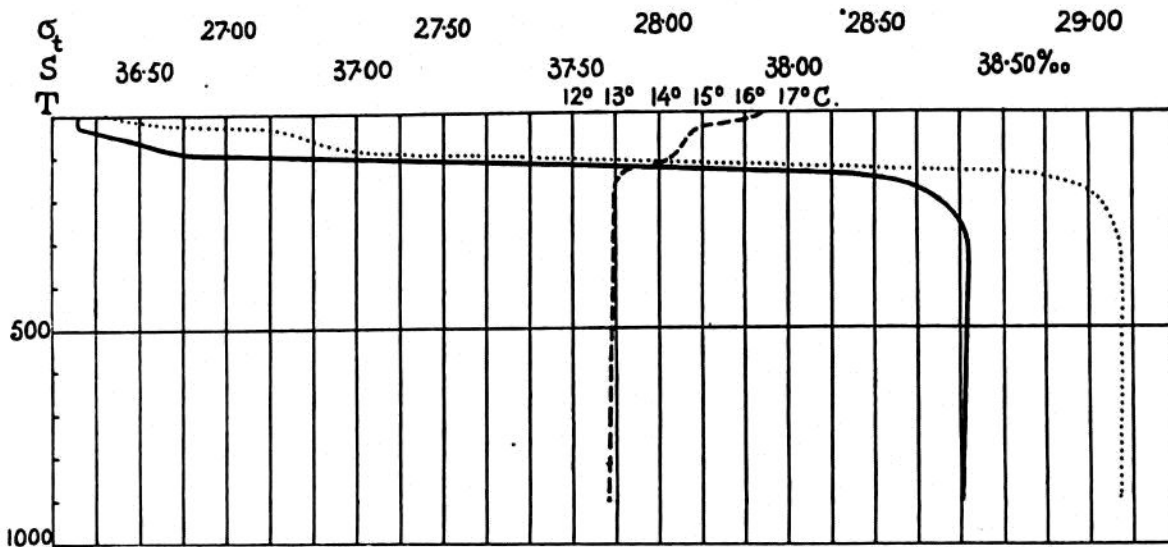


FIG. 197.—TEMPERATURE (BROKEN LINE), SALINITY (CONTINUOUS LINE), AND DENSITY (DOTTED LINE) AT STATION 19, IN THE MEDITERRANEAN (2nd May 1910).

of level between the layers of 100–150 metres. On the 29th April, about 2 P.M., the current running in must have been feeble and that running out must have been strong, judging from the later current-measurements, and the salt Mediterranean under current extended up towards the surface, whereas on the 30th April, between 9.30 and 10.30 A.M., the upper current was very strong and the under current from the Mediterranean very feeble in comparison, and the salt water from the Mediterranean lay about 100 metres deeper. The vertical distribution of salinity and temperature is seen to accord with the currents.

Two days after these observations in the Straits of